Colusa Subreach Planning Project Advisory Workgroup
Draft Meeting Summary
June 6, 2005 10:00 AM - 2:00 PM
Colusa County Farm Bureau
520 Market Street
Colusa, CA

Summary prepared by Carolyn Penny, Facilitator, Common Ground: Center for Cooperative Solutions with assistance from Ellen Gentry, Sacramento River Conservation Area Forum

Present:
AW: Don Anderson, Annalena Bronson, Burt Bundy, Gary Evans, Mike Fehling, Rebecca Fris, John Garner, Francis Hickel, Pat Kittle, Kelly Moroney, Dan Obermeyer, Jeff Sutton, Jon Wrysinski, and Dawit Zeleke
Alternates: Joan Phillipe (Alternate for John Rogers)
Staff: Beverly Anderson-Abbs (SRCAF), Michelle Baker (Common Ground), Ellen Gentry (SRCAF), Facilitator Carolyn Penny (Common Ground), Project Manager Gregg Werner (TNC)
Guests: Joe Countryman, Greg Golet, Butch Hodgkins, Dee Ohliger

Agenda:

Agenda Item	Approximate Start Time	Lead Person	Topic	Outcome
1.	10:00	Carolyn Penny, Facilitator	Welcome, Introductions, May Meeting Summary	• Introductions. Approve agenda. Approve May summary.
2.	10:10	Joe Countryman, All	Hydraulic Analysis, Large Woody Debris, and Channel Capacity Studies	• Explore the best way to get AW questions answered and the resulting scope of work, budget, and deliverables.
3.	12:00	Public	Public Comment	• Receive comment.
4.	12:15	All	Lunch and Break	
5.	12:45	Gregg Werner, All	Review of CSP budget	• Shared understanding of CSP budget amounts and status.
6.	1:00	Gregg Werner, All	AW-Identified Studies	• Learn from additional information collected by Gregg on current status of information in these areas. • Determine priorities, process and timeline for

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				development of projects.
7.	1:30	Gregg Werner, All	Summer Meeting Schedule	• Discuss summer meeting logistics and expectations. • Discuss possible workshop. • Determine subcommittee meeting dates.
8.	1:45	Carolyn Penny, All	Next Agenda and Next Steps	• Shape next agenda; articulate interim steps.
9.	2:00	Carolyn Penny	Adjourn	

Review of May Meeting Notes

The meeting began at 10:00AM with a welcome by Carolyn Penny, Facilitator for the Advisory Workgroup (AW), and self introductions of all participants. The May meeting notes were accepted as final without changes.

Hydraulic Analysis, Large Woody Debris, and Channel Capacity Studies

Joe Countryman, MBK Engineer and formerly of the US Army Corps of Engineers, gave a PowerPoint presentation on the Sacramento River Flood Control Project (SRFCP), a federal partnership involving navigation and reclamation. The original design was to make the system a complete unit and, as such, had several goals: 1) to make room for the water to reach the ocean; 2) account for the loss of flood basin storage; 3) provide uniformity of levee design; 4) provide a method for handling debris; and 5) combine navigation and flood control needs. Levees were kept close to the river to allow scouring of the channel, with bypasses designed to handle the bulk of the flow (1:4-5 flow). In this design if the water goes up 1 foot, more than 100 times more water goes into the bypass than the river.

Joe mentioned that the weirs have not reached a critical mass of debris to warrant allocating money for cleaning except for the Tisdale weir which is a priority. The flow split at this weir has changed because of sediment buildup at the top end of the bypass.

Joe pointed out that the Sacramento River only carries about 60,000 cfs at Colusa and the lower part of the flood control system is heavily impacted by the Feather River which can carry up to 320,000 cfs into the Sacramento Valley. He also explained that the levees are not perfect and they do fail. The SRFCP was designed to account for the floods of 1907-1909, which have proven to be 25 year flood events, relatively small compared to the events seen in the last half of the century. He also noted that the level of protection had been increased by flood regulation provided by Shasta Dam. The concept of scouring the river channels to allow navigation has proven successful. The river channels of the Feather and the American are

deeper now than in 1965 as hydraulic mining debris has slowly been washed out. Bank erosion has become more of a problem associated with the high channel flows and bank protection in the form of "rip-rap" is becoming prohibitively expensive because of mitigation requirements (up to $5000/lineal foot). Additionally, some of the levees were initially built with sand cores, leading to seepage in areas. He said that setback levees should be considered along the Sacramento River with vegetation maximized as long as it is consistent with project flood protection.

He also pointed out that routine dredging was done, not to reduce flooding concerns, but to maintain navigable channels for barge operation. When barge traffic in the river stopped, dredging was halted.

During the discussion, the AW first addressed the issues of capacity and silting. Jon Wrysinski asked to what degree data exists to compare current and historical channel capacity. Jeff noted that siltation is a dynamic of the river as indicated by the need for dredging up to 30 years ago. Joe responded that a current/historical channel capacity comparison would need to look at the whole subreach. He mentioned that a comparison of channel cross sections would not tell the complete story because the river channel changes so much. He also stated the USCOE comprehensive study collected a lot of recent data about the river that may be useful for some comparative analysis of the river. Joe also indicated that diminished capacity can be an issue, as has been observed with the Tisdale Weir.

Francis noted that information about capacity would be significant to people in the Colusa area. Joe noted that there's a need to be careful not to conclude sand present now will also be present during a flood. He explained that flood flows scour gravel bars and increase the channel depth. John Garner mentioned that summer silting can affect the river's ability to handle spring run-off for a non-flood event. In response to these questions, Joe noted that the sustained flows from a full Lake Shasta make this year a good time to study the siltation and capacity questions.

In regard to large woody debris (LWD), Greg Golet asked how much it reduces channel capacity. Joe responded that LWD is not usually an issue for flood control capacity. However, he noted, LWD can have a definite impact at bridges and where a river is narrowly confined. Francis mentioned a concern for the impact of downed trees with the creation of sandbars and that snapshot studies do not always reflect the full picture of the river. Joe responded that there is a need to quantify through hydraulic modeling the degree to which LWD has and would have an impact. We can look at aerial atlases from the 1960's to present to see if numbers of sand bars or sizes have changed. It is impossible to make the river stay exactly the same, but some changes people talk about may be myth.

Jeff mentioned a desire for mitigation credit for the work being done already in the Colusa area. Annalena clarified that the Hamilton City setback levee project was self-mitigating, not an example of mitigation credit applied to another project.

Butch Hodgkins, (retired Exec Director, SAFCA) explained that he is working on a project in the Natomas area where new setback levees are being considered. Building the new levees 500 feet back from the original ones proved to be less expensive than doing erosion repair on the existing levees. This project also provides an opportunity to remove rock from the existing levees as mitigation to benefit habitat. Setback levees and hard points are being built to maintain the channel without downstream impacts. There is hope that the setback levees will provide a balance of habitat for the giant garter snake. This project is being considered for expansion to a 5-mile section of the levee from the current vision of a 1.5-mile levee section. Butch is optimistic that the agencies are more open to looking at the bigger picture with less project-by-project negotiation. Francis commented that the locals could probably swallow 500 foot setback levees. When asked for more information on his interest in attending this meeting, Butch mentioned that SAFCA is considering starting its own process similar to the CSP AW.

Joe went on to discuss the effects of restoration on neighboring lands, pointing out that vegetation downstream of a weir would tend to have a net benefit on landowners downstream as more water would be diverted into the bypass. This would have a noticeable decrease on flooding below the weir with no noticeable increase on levels in the bypass. In contrast, a removal of vegetation would increase levels within the river channel and decrease bypass flows. Differences are seen depending on how narrow the channel is. The further apart the levees are the more restoration can occur with no impact on the river. Essentially, the flood control project was designed to pass a certain flow at a certain stage. If the river is already above that, no net increases from the habitat restoration should occur. If the level is lower than design flow, raising it a little will have no impact.

Francis asked Joe to discuss the impact of the cessation of snag removal on flood control. Joe responded that he did not know the answer since he had never been asked to look at that specific question. Burt noted that Koll Buer answered a similar question with the information that the impact is episodic and highly dependent on flood events.

In response to Jeff's concern that more information is needed on the protection of hard points in the Colusa subreach, Joe noted that there are times when it is cheaper to stabilize a river. Although the environment is very important, it may be necessary to protect the economy and protect infrastructure by stabilizing certain areas.

Dan reflected on Joe's earlier comments on the minor degree of habitat restoration impact on flood control. He asked for information on the connection between habitat restoration and bank erosion. Joe noted that, while bank erosion is a very significant problem, it is not typically caused by the planting of vegetation. Jeff added that a small increase in river level can have a huge impact for flood control in the Colusa area.

In response to Francis' and Rebecca's question on how the AW should think about scoping of a hydraulic analysis, Joe stated that the most important part of the hydraulic analysis process is calibration. He also explained that a 1/10 to 2/10 change in flow levels that might be shown by modeling was not a concern because models always will show some difference. Joe recommended starting with the USACOE study/model and reviewing it for calibration to the

1997 flood event (USACOE). The AW would have a chance to review the calibration to the 1997 flood event and a lesser event. Then, based on this calibration, the AW would have a base from which to ask questions and assess various factors, such as the stages of vegetation. He estimated the cost between $30-50,000 and taking from 4-6 months to achieve the calibration.

Gregg asked if more time is required to include detailed topography in the model. Joe suggested proceeding with the calibration step and then working in the more detailed information, including the consideration of LWD by adjusting the roughness factor. He noted that the Ayres model is 2-dimensional while the USACOE model is 1-dimensional at an "unsteady" state with ¼-mile cross-sections. He concluded that the Ayres 2-dimensional model has more capacity for manipulation and provides more information on a specific area. The strength of the 1-dimensional model is its indication of system capacity.

Public Comment

Jeff Sutton was asked to provide two comments to the AW by community members. He related two medical emergency incidents that recently occurred near the Colusa Boat Ramp area that involved personal safety issues. One incident was simplified because the Boat Ramp was open, and emergency personnel were able to get to the boater with heart problems quickly. The Boat Ramp was closed 5 days later and Jeff noted the story could have turned out much worse at that time. The other incident involved a neighbor whose boat was caught on a snag in the river. His wife broke her arm as they disengaged from the snag. Jeff noted that these examples illustrate the personal health and safety dimension of these issues.

Budget Review

Gregg Werner reviewed the distributed Colusa Subreach Planning (revised) Budget as of 5/24/05. In the ensuing discussion, Jeff asked if the indirect recovery rate is project-specific. Gregg noted that the rate is organization-specific and reviewed yearly. In response to questions from Francis and John Garner, Gregg described the TNC staffing assignments in more detail and that the project management and administration task is specific to this project and these sites. He also noted that TNC would build on this work for any future sites.

Francis inquired about the role of private and public funding for TNC projects in general and this specific project. Dawit responded that TNC works with grants and private funding as well as public funding. For the CSP project, private funds assisted with the purchase of the Ward property; otherwise this project is publicly funded.

Jeff asked for a more detailed description of the items covered in the indirect rate. Gregg described the involvement of support staff such as accounting and legal personnel.

AW-Identified Studies

Gregg estimated 3-4 months, from the Scope of Work to having someone under contract for planning and research projects. The goal is to decide on projects and have draft scopes of work by mid-summer with contractors starting work 3-4 months later. He expects the AW would have study results to review next spring, summer, or fall depending on the study.

The AW had a discussion on the characteristics of 1-dimensional as contrasted with 2-dimensional hydraulic modeling. Gregg and Dawit noted that the 2-dimensional model gives more information because it better includes land uses. Burt stated that Joe's presentation indicated that a 1-dimensional model would have an advantage in certain places. Several team members expressed concern that the questions should be answered by whichever is the best choice of models. Other team members expressed concern about the cost of using a combination of models. Gregg agreed to explore the costs and pros/cons for both models and return with more information for the August meeting (see Next Steps, below, for a detailed list of the issues to be explored.) It was suggested that a scope of work be drafted by the Hydraulic Analysis Subcommittee (Annalena, Francis, Jon, Jeff and Dawit) and distributed for AW review in advance of the August meeting.

Greg Golet presented a handout on LWD. Burt commented that the SRCAF might be able to look at LWD on a watershed level. Dan suggested proceeding with scopes of work for all studies other than LWD. He also noted that there may be a way to focus LWD studies on specific spots. Francis reminded the group that LWD has an impact on recreation and may represent a win/win opportunity. The AW agreed to proceed with scopes of work for all studies other than LWD and then to recheck the need for additional LWD information.

Next Steps

In regard to the hydraulic modeling, Gregg will explore the following issues and bring more information to the August meeting.

- How each model would be calibrated
- Strengths/weaknesses of 1-dimensional compared to 2-dimensional modeling
- Costs of using either or both models
- Availability and usability of USACOE comp study information

The Hydraulic Analysis Subcommittee (Annalena, Francis, Jon, Jeff and Dawit) will meet before the August meeting to create/review a draft hydraulic analysis scope of work. The subcommittee work product will be circulated to the AW before its August meeting.

Gregg and Greg will draft outlines for the scopes of work for the AW-identified projects other than LWD and hydraulic analysis and include them for review at the August meeting.

AW members will send comments on the draft subreach report to Gregg within 3 weeks, by June 27.

The SRCAF Landowner Incentives Workshop is scheduled for July 28, 1:30-4:30PM, at the Monday Afternoon Club in Willows. More information will be available in the SRCAF newsletter later this month.

Meeting Schedule

The next CSP meeting is scheduled for August 1, 10:00 AM to 2:00 PM, at Colusa Farm Bureau.

Agenda topics will include:

- Hydraulic Analysis Scope of Work
- Other AW-Identified Projects Scopes of Work
- AW Workshop, perhaps a half-day land tour of proposed and existing restoration sites